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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/995,464	11/28/2001	Alex Veprinsky	07072-142001	2240

7590 01/13/2005

FRANK R. OCCHIUTI
Fish & Richardson P.C.
225 Franklin Street
Boston, MA 02110-2804

EXAMINER

PATEL, DHAIRYA A

ART UNIT	PAPER NUMBER
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2151

DATE MAILED: 01/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application N . 09/995,464	Applicant(s) VEPRINSKY ET AL.	
	Examiner Dhairya A Patel	Art Unit 2151	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 February 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>2/20/2003</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Application # 09/995,464 was filed on 11/28/2001. Claims 1-10 are subject to examination.

Claim Rejections - 35 USC § 112

2. Claim 7 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The examiner does not have a clear view as what the phrase "conform to a common interface" means. Appropriate clarification is needed.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2,9,10 are rejected under 35 U.S.C. 102(b) as being unpatentable by Yanai et al. U.S. Patent # 5,742,792 (hereinafter Yanai).

3. As per claim 1, Yanai teaches in a remote data mirroring arrangement of data storage systems (Fig. 1), a method of operating a data storage system comprises:

-determining that storage traffic is to be transferred between the data storage system (Fig. 1 element 14) and a remote data storage system (Fig. 1 element 46) to which the data storage system is coupled by an IP network (Fig. 1 element 40) (column 8 lines 21-36) in accordance with a remote data service application;(column 9 lines 58-67) (column 10 lines 1-8, lines 14-22) and

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-enabling transfer of the storage traffic between the data storage system and the remote data storage system over the IP network using a native connection to the IP network. (column 9 lines 58-67) (column 10 lines 1-8, lines 14-22)

4. As per claim 2, Yanai teaches the method of claim 1, wherein the IP network is the Internet. (Column 8 lines 21-36)

5. As per claim 9, it teaches the same limitations as claim 9, therefore rejected under same basis.

6. As per claim 10, Yanai teaches a data storage system comprising: one or more storage devices (Fig. 1 element 14, 46); a controller coupled to the one or more storage devices (Fig. 1 element 16, 44); and wherein the controller directs local storage traffic from the data storage system to a remote data storage system over an IP network using a native connection to the IP network (Fig. 1 element 16,44) (column 8 lines 15-36, lines 51-61)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yanai in view of Blankenship et al. U.S. Patent # 6,624,388 (hereinafter Blankenship).

7. As per claim 3, Yanai teaches the method of claim 1, but fails to teach IP network

is a private network. Blankenship teaches IP network is a private network. (column 56-59). It would have been obvious at the time of applicant's invention to implement Yanai's invention in Blankenship's invention to come up with private network. The motivation for doing so would have so that data can be mirrored to a remote storage, which would be part of the private network.

8. As per claim 4, Yanai teaches the method of claim 1, but fails to teach enabling comprises using a socket interface to interface an operation of the remote data service to TCP/IP protocols. Blankenship teaches a socket interface to interface (column 9 lines 43-46) an operation of the remote data service to TCP/IP protocols. (Fig. 4) (column 9 lines 40-58). It would have been obvious at the time of applicant's invention to implement Yanai's invention in Blankenship's invention to come up with a socket interface for the operation of remote data service. The motivation for doing so would have been so that the TCP/IP may interface to plurality of drivers to communicate with network interfaces. (column 9 lines 40-58)

9. As per claim 5, Yanai teaches the method of claim 4, wherein the native connection comprises TCP/IP over Gigabit Ethernet. (column 8 lines 22-36). The reference teaches the connection is high-speed connection using SONET, which ranges its speed up to 2.8 Gbps.

10. As per claim 6, Yanai teaches the method of claim 5, but fails to teach the socket interface is split across two processors, with a first socket relay residing on a first processor and a second socket relay residing on a second processor. Blankenship teaches the socket interface is split across two processors (Fig. 3 element 124, 126),

with a first socket relay residing on a first processor (Fig. 3 element 174) and a second socket relay residing on a second processor (Fig. 3 element 174). It would have been obvious at the time of applicant's invention to implement Yanai's invention in Blankenship's invention to come up with socket interface residing on two processors. The motivation for doing so would have been so that to communicate using the socket relay and TCP/IP protocols.

11. As per claim 7, Yanai fails to teach the method of claim 6, wherein the first socket relay and remote data service application operation conform to a common interface. Blankenship teaches the method of claim 6, wherein the first socket relay and remote data service application operation conform to a common interface. (column 9 lines 46-56). It would have been obvious at the time of applicant's invention to implement Yanai's invention in Blankenship's invention to come up with first socket and remote data service application to conform into a common interface. The motivation for doing so would have been so that communicate using TCP/IP stack.

12. As per claim 8, Yanai teaches the method of claim 4, but fails to teach enabling further comprises using the socket interface to create a socket from which the native connection to the IP network is formed. Blankenship teaches enabling further comprises using the socket interface to create a socket from which the native connection to the IP network is formed. (column 9 lines 41-54). It would have been obvious at the time of applicant's invention to implement Yanai's invention in Blankenship's invention to come up with a native connection using socket interface.

The motivation for doing so would have been so that communication to the remote system can be established using the socket interface in an IP network.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

A) "Remote Data Mirroring" by Yanai et al. U.S. Patent 5,742,792

B). "System and Method providing Distributed welding Architecture" by Blankenship et al. U.S. Patent # 6,6624,388

14. A shortened statutory period for response to this action is set to expire **3 (three) months and 0 (zero) days** from the mail date of this letter. Failure to respond within the period for response will result in **ABANDONMENT** of the applicant (see 35 U.S.C 133, M.P.E.P 710.02, 710.02(b)).

15.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dhairya A Patel whose telephone number is (571) 272-4066. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zarni Maung can be reached on (571) 272-3939. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DAP


ZARNI MAUNG
SUPERVISORY PATENT EXAMINER